

Louisiana Delta Community College

Expanded Course Syllabus – Chemistry 120

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1. Course Name: Chemistry II

2. Course Prefix and Number: CHEM 120

3. Course Description: This course includes the fundamental laws, modern theories, and principles of chemistry with emphasis on reaction kinetics and equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and the chemistry of metals and nonmetals. This course is intended for science and engineering curricula.

4. Credit hours: 3

5. Prerequisites and Co-requisites: Successful completion of Chemistry 110

6. Text: Chemistry: The Central Science, 11th ed., Brown, LeMay, Bursten, Murphy, Prentice Hall

7. Other Text References: Test Item File, ACS Style guide, Solutions Guide

8. Learning Outcomes: On completion of this course, the student will be able to:

1. Explain the relationship of several factors on reaction rates, such as concentration, temperature, and catalyst
2. Determine equilibrium constants for a variety of reactions
3. Identify the key differences in strong/weak acids/bases
4. Explain the chemical reactions that are occurring in the Earth's Atmosphere, Oceans, and Fresh Water
5. Predict the spontaneity of chemical reactions based on the First, Second, and Third Laws of Thermodynamics
6. Explain how voltaic cells work in terms of Oxidation Reduction Reactions
7. Predict patterns in nuclear stability and decay
8. Explain the differences in Nuclear Fission and Fusion
9. Identify properties/preparations/reactions of Hydrogen, Halogens, Nobel Gases, and of groups 4A, 5A, and 6A
10. Explain metallic bonding and identify physical properties of metals

11. Identify major classes of organic compounds

10. Evaluation/Assessment Measures:

a. 4 major examinations (17.5% each)	70 %
b. Quizzes/Homework will be combined for a total of	10 %
c. Final Exam (Cumulative on Selected Topics)	20 %
d. Chemistry related paper (Bonus)	4 %
Literature Review on Current topic in Chemistry	

Grading Scale

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 - 59	F

Grades will not be rounded to 2 significant figures based on the rounding rules found in the text. You will be given the grade you earn. Bonus work will not be assigned on an individual basis, but it will be assigned to the class as a whole. Any bonus work assigned will be lengthy and require significant outside the class work.

Suggested problems will be assigned from each chapter. They will not be graded, but there is a strong correlation between effort put into the homework and test performance.

If you need to make up a test then it is your responsibility to show up on the appropriate day. If you do not then you will be given a zero for the test no exceptions.

11. Course Outline

	Chapter Description	Approximate Time
Chapter 14	Chemical Kinetics	1.5 weeks
Chapter 15	Chemical Equilibrium	1.5 weeks
Chapter 16	Acid-Base Equilibrium	1.5 weeks
Chapter 17	Additional aspects of Aqueous Chemistry	1.5 weeks
Chapter 18	Chemistry of the Environment	1.5 weeks
Chapter 19	Chemical Thermodynamics	1.5 weeks
Chapter 20	Electrochemistry	1.0 weeks
Chapter 21	Nuclear Chemistry	1.5 weeks
Chapter 22	Chemistry of the Nonmetals	1.5 weeks
Chapter 23	Metals and Metallurgy	1.5 weeks
Chapter 24	Chemistry of Coordination Compounds	1.0 weeks
Chapter 25	Organic and Biological Chemistry	1.5 weeks

12. College and Classroom Polices

A. Students with Disabilities

The Office of Student Counseling and Disability Services coordinates campus-wide efforts to provide services and accommodations for students with disabilities. In compliance with the American Disabilities Act (ADA), students with documented disabilities who need course accommodations, have emergency medical information or require special arrangements for building evacuation should contact the instructor within the first two weeks of class at 318-342-3707 or office listed above.

B. Attendance

Attendance policies correspond to those listed in the *Delta Academic Catalog*. Class attendance is regarded as an obligation as well as a privilege, and all students are expected to attend regularly and punctually all classes in which they are enrolled. A student shall submit written excuses for all class absences to the appropriate instructor within three class days after the student returns to the respective class. Students are responsible for all class work missed regardless of the reason for the absence. **Students can miss a maximum of 7 classes in a TTh class or 11 for a MWF class. If any more absences are taken then your letter grade will be dropped by one grade for each subsequent absence. No excuses are required to miss a test. If you miss a test then it must be made up on the makeup date listed in the syllabus, no exceptions. The makeup test will be all fill in the blank and essay questions. If there are conflictions in the test date that can be preapproved with cause then there is a possibility of taking the test early. There will be no makeup given for missed quizzes. If you are late for the class and the door is locked then you will be counted absent for the day.**

D. Academic Support Services: Delta provides students with resources and support outside of the classroom through the Library/LRC in Coenen 150 (<http://www.ladelta.cc.la.us/library>) and a Student Success Center which provides workshops, resources, and tutorial support. **Test guides and other important information will be put on hold in the delta LRC.**

E. Electronic Devices/Other noise-making devices

Cell phones should be turned to vibrate. If you have to answer the phone please leave the classroom as quietly as possible. This should be the exception not the norm. If this policy is abused the student could be asked to turn off their cell phone. **If a student is caught texting in the class then the student will be asked to leave and be counted as absent on the first offense. On the second offense the student will be given a zero on the next test. No makeup work will be given.**

F. Safety Regulations

No firearms, weapons, tobacco products, alcoholic beverages, or illegal drugs are permitted in the classroom. In the event you do not adhere to this policy, you will be asked to leave the classroom and expulsion from the college is possible.

C. Academic Integrity

Louisiana Delta Community College upholds standards of academic integrity of its students and faculty. Academic integrity is essential to assure learning through assessment. Students are responsible for being aware of and adhering to academic rules and regulations for the college and classroom as defined in the *Delta Academic Catalog* and *Delta Student Handbook*. Academic dishonesty includes but is not limited to cheating, fabrication, plagiarism, interference, misrepresentation, violation of class rules, and fraud. Identified instances of academic misconduct or dishonesty warrant disciplinary actions by the instructor or college. Please refer to Delta's *Student Handbook* for more information. **On test days bags, books, cell phones, and any other personal items will be left at the front of the room. The only thing that will be permitted at the desk is a pencil, a calculator, and a scantron. If you forget the scantron then I will have some for purchase at an elevated price. Also No. 2 pencils are required. I will also have some for sale at an elevated price. If you fill out a test in pen then the scantron will not grade it and neither will I. TI-84 Plus Calculators will be provided for the test. No other graphing calculator will be allowed. If you would like to use a non-graphing calculator on the test, you must bring it to my desk for examination prior to the start of the exam. Once the test is graded the test will be returned to the students. During the time that the exams are passed back, no writing or writing utensils will be allowed. If you are caught writing during this time it will be considered cheating and you will fail the test.**

LOUISIANA DELTA COMMUNITY COLLEGE CODE OF STUDENT CONDUCT

All members of the College community are expected to respect the principles of honesty and mutual trust embodied in the honor code. Students are responsible for preparing their own written work in every class unless specifically permitted by the instructor to combine efforts on an assigned project. Students are expected to understand the meaning of plagiarism and to avoid all suspicion of plagiarism in papers prepared. Furthermore, students are expected neither to sanction nor tolerate violation of the honor code by others.

Students will not give or receive any unauthorized aid on any examination or paper. If a student witnesses anyone else doing so, that student must be reported immediately to the faculty member and/or the appropriate College administrator.

ACADEMIC MISCONDUCT

Types of Academic Misconduct (1.01)

Although all academic misconduct is wrong, premeditated acts of academic misconduct represent a greater threat to the integrity of the College than do unpremeditated acts of academic misconduct.

Categories of Academic Misconduct (1.02)

Cheating is the intentional use of inappropriate assistance, information, materials, or study aids in any academic exercise. Cheating includes the use of unauthorized assistance, information, or materials on tests, homework, quizzes, papers, projects, and all other academic assignments. Additionally, students who provide such unauthorized assistance are also guilty of cheating.

Fabrication is defined as altering official college documents, forging signatures of college officials or other individuals, or changing grades and other academic records. Fabrication also includes submitting false records to gain admission to the College. Furthermore, any oral or written misrepresentation of truth in any communication with College administrators, faculty, or staff is also fabrication.

Plagiarism involves submitting another person's ideas, words, data, arguments or sentence structure as the student's own without proper documentation.

Misrepresentation is intentionally presenting oneself as someone else, or intentionally misrepresenting a condition or situation to gain credit or concessions on academic work, including make-up tests, projects, and class assignments.

Violation of class rules is the intentional failure to follow the class policies concerning assignments and behavior.

Other forms of academic misconduct include **complicity**, the willing involvement with others in any academic misconduct; **software fraud**, the unlawful downloading and copying of computer software used in the creation of academic work; and **multiple submissions of work**, handing in academic work that was done previously by the student for another class, or by someone else.

Disciplinary Sanctions for Academic Misconduct (1.03)

Depending on the type of violation, the number of times a student has committed an offense, and the discretion of the instructor, penalties may include any combination of the following: **I will seek the maximum penalty for each infraction.**

1. Loss of partial credit for the assignment.
2. Reduced grade for the course.
3. Grade of "F" for the course.
4. Zero assigned to test or assignment.
5. Academic Probation
6. Counseling

7. Academic Suspension
8. Expulsion

Administration of Penalties (1.04)

Instructors assign penalties to the student based on the above criteria. Student appeals of the penalty will be directed to the appropriate Academic Supervisor, or, if necessary, to the Dean of Instruction.

Should the student's violation of the Academic Honesty Policy warrant probation, suspension, or expulsion, the matter will be referred to the **Admissions and Academic Appeals Committee. Appeals of penalties will be directed to the Vice Chancellor of Academic and Student Affairs.**

The complete Academic Misconduct policies and the Due Process Procedure (sections 1.05-1.06) are listed in the Student Handbook.